

A new species of the genus *Delias* from southeastern Mindanao, the Philippines (Lepidoptera, Pieridae)

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Abstract *Delias magsadana* sp. n. is described from southeastern Mindanao.

Key words Pieridae, *Delias magsadana* sp. n., Mindanao, taxonomy.

Delias magsadana sp. nov. (Figs 1-5)

Male (Figs 1-2). Upperside (Fig 1): Ground colour creamy white; basal portion of wings diffused with grey and black scales. Forewing costa black diffused with black scales interiorly; black distal border broadened at apex, reaching slightly below vein 1b, and having a series of submarginal white spots in spaces 2 to 6 and 9, the one in space 3 being largest, the one in space 4 poorly developed; discocellular black bar broadly developed and diffused with black scales; all veins distally stained with black; dorsum fringed with white hairs; cilia white mixed with black. Hindwing with black marginal border running from spaces 1b to 6, and broadened in spaces 4 to 6 and diffused with black scales, forming submarginal white patches in it; black markings underneath faintly visible through wing; veins from 1b to 7 distally stained with black; anal area clothed with white semirecumbent hairs; cilia white mixed with black.

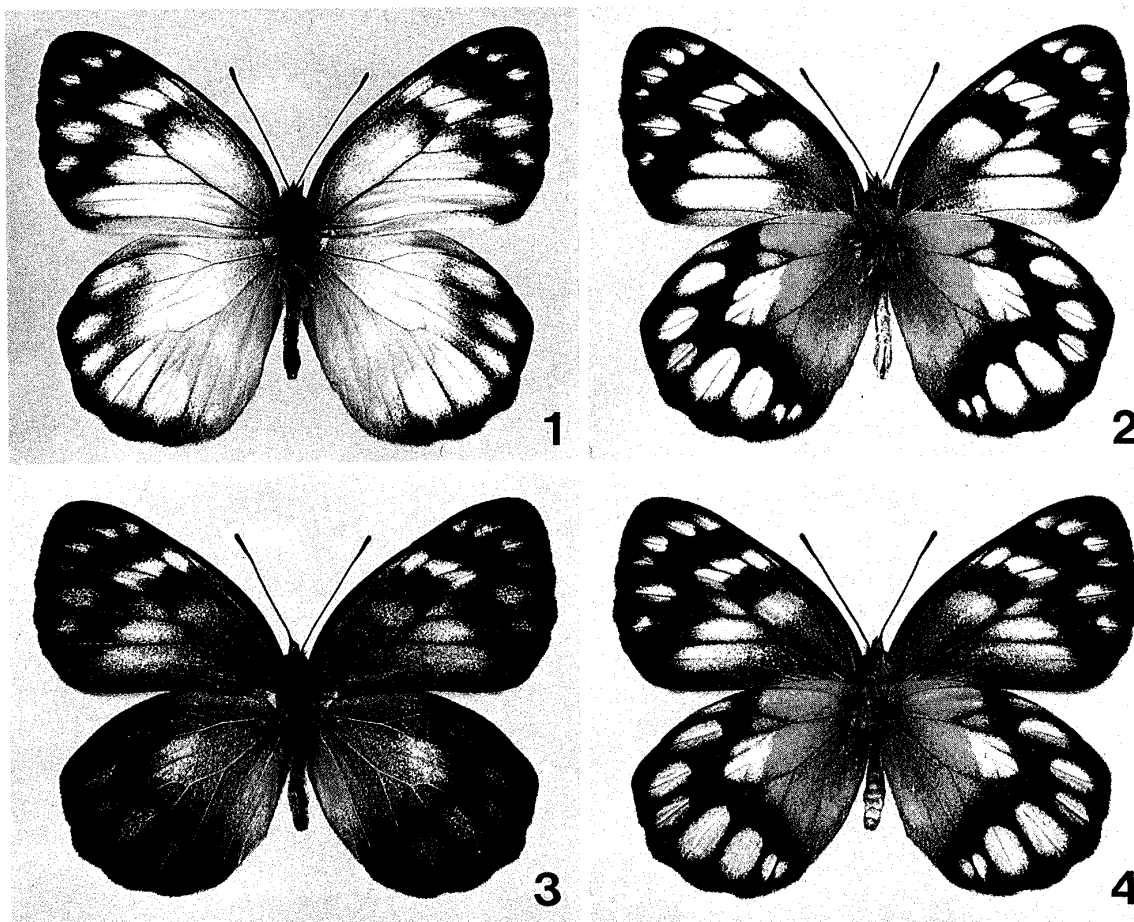
Underside (Fig. 2): Forewing ground colour white; a basal quarter of wing dusted with grey and black scales, and space 1a diffused with grey scales; costa black; distal border and a submarginal series nearly as on upperside, but more distinct; discocellular broad and black; all veins black. Hindwing ground colour black with basal one-third yellow; broad distal black border running from costa to tornus, bearing a series of oval submarginal white patches from spaces 1b+c to 7, the one in space 1b+c split into two small spots, the ones in spaces 2 and 3 being larger than the others, the one in space 7 thin, dusted with grey scales, the ones in spaces 2 to 6 slightly diffused with yellow scales; basal yellow area dusted with grey scales in its basal half; a large, somewhat diamond-shaped white discal patch occupying the outer quarter of cell and beyond it.

Wing shape. Forewing with costa arcuate basally and straight exteriorly, apex obtusely rounded, termen slightly arcuate and somewhat dented at spaces 2 to 4, tornus rounded and dorsum straight. Hindwing with costa evenly rounded, apex obtusely angulate, termen straight at space 5 and crenulate at spaces 2 to 3. Antennae black, about 0.49 times as long as the length of forewing, with club long and slender.

Eyes naked. Thorax and abdomen black, clothed with grey long hairs (on thorax and the base of abdomen) or covered with the white scales (on abdomen).

Forewing length. 27-32 mm.

Male genitalia (Fig. 5). Tegumen slightly incurved, widened posteriorly and trapezoidal in dorsal aspect; valvenansatz broad; saccus about 1/3 as long as ring in lateral aspect. Uncus trifurcate, median lobe narrow, pointed and curved inwardly; outer lobes small and round; accessory lobe rounded and flexed inwards. Valva broad, distal portion produced to a long and broad triangular process in lateral aspect; dorsal margin



Figs 1-4. *Delias magsadana* sp. nov. 1. ♂, holotype. 2. *Ditto*, underside. 3. ♀, para-type. 4. *Ditto*, underside.

anteriorly incurved, then curved outwardly; ventral fold narrow, thickened at lower angle. Phallus short and slender; aedeagus slightly curved dorsally near zone; subzonal sheath about $1/2$ as long as suprazonal sheath; basal prong well developed. Juxta Y-shaped in posterior aspect.

Female (Figs 3-4). Upperside (Fig. 3): Similar to male, but black colour slightly paler. Forewing space 1a entirely grey; basal $1/3$ of wing dusted with black and grey scales; black distal border broader than in male and becoming more greyish towards dorsum; discocellular broader and more distinct than in male; all veins black. Hindwing with black marginal border occupying the distal half of the wing and submarginal patches on it diffused with grey scales; basal half of wing dusted with black and grey scales except for veins and oval discal patch; yellow basal patch of the underside is obscurely able to see through.

Underside (Fig. 4): Similar to male, but both black and yellow colour slightly paler, and all markings less distinct. Forewing space 1a grey; black distal border as on the upperside. Hindwing with black distal border slightly broader than in male.

Wing contour similar to male, but forewing more strongly rounded at the termen and hindwing slightly more wavy at the termen.

Forewing length. 30-32 mm.

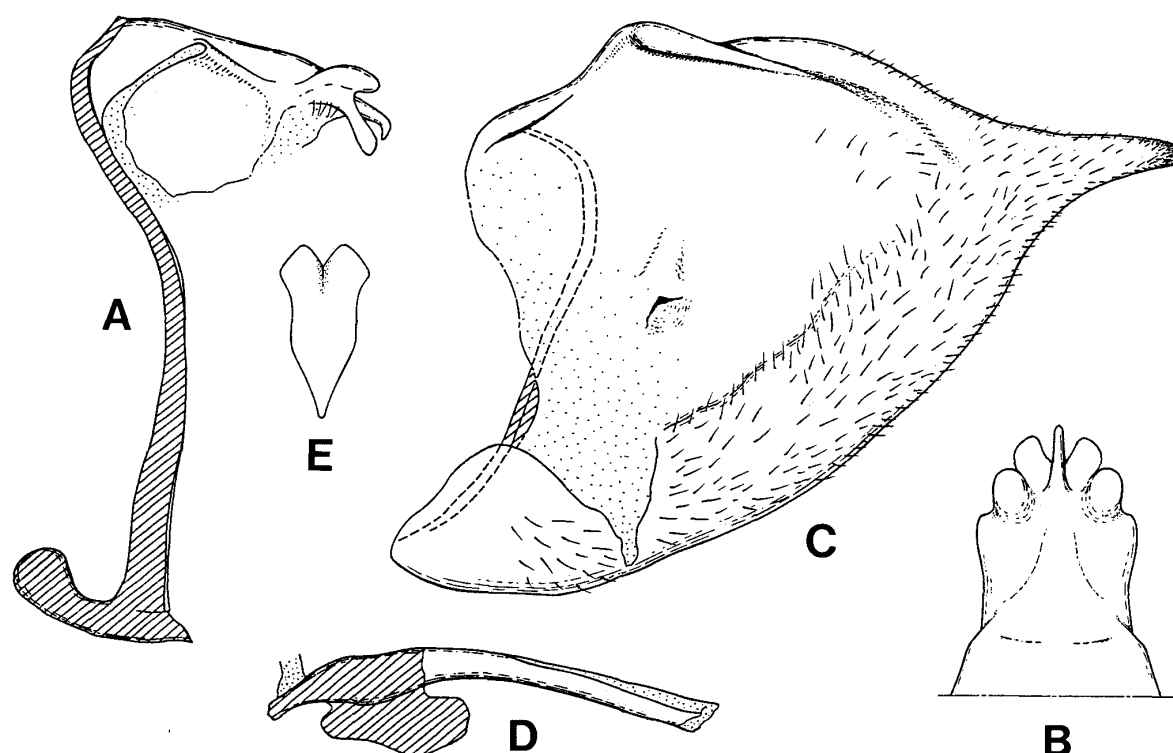


Fig. 5. Male genitalia of *Delias magsadana* sp. nov., paratype (A: Ring in lateral aspect. B: Uncus in dorsal aspect. C: Right valva in inner aspect. D: Phallus in lateral aspect. E: Juxta in posterior aspect).

Holotype. ♂, Mt Magsad (850 m), Southeastern Mindanao, 16. viii. 1994, S. Takei leg. Paratypes. Same data as holotype, 1 ♀, Ryo Takei leg; 2 ♂, A. Yamamoto leg; 3 ♂ 1 ♀, S. Takei leg. Holotype and a female paratype will be deposited in the collection of the National Science Museum (Natural History), Tokyo.

This new species closely resembles *D. schoenigi* Schröder, 1975, but is easily distinguished from the latter by the following characters: 1) black distal border on the upperside of hindwing is much broader; 2) basal portion of the underside of hindwing is yellow and its basal half is dusted with grey and black scales, while in *schoenigi* it is black and entirely dusted with yellow scales; 3) a series of submarginal patches on the underside of hindwing is white, while in *schoenigi* it is yellow or mixed with yellow; 4) a series of submarginal spots on the underside of forewing is white, while in *schoenigi* it is yellow or mixed with yellow at apex; 5) valva is more strongly protruded in its distal portion, and 6) basal prong of phallus is more developed.

Reference

Schröder, H., 1975. Neue *Delias* aus Mindanao (Lep., Pieridae). *Ent. Z., Frankf. M.* 85: 265-269.

摘 要

ミンダナオ島東南部産 *Delias* 属の 1 新種 (山本 晃・竹井 慎)

ミンダナオ島東南部のマグサド山で得られた *Delias* 属の 1 新種 *D. magsadana* を記載した。本種はミンダナオ島に産する同じ *georgina* subgroup の *D. schoenigi* と近似するが、*D. schoenigi* がミンダナオ島の幾つもの山塊に生息するのに対し、本種はきわめて局地的に分布し、翅斑ならびに交尾器に *D. schoenigi* とは顕著な相違がみいだされる。

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